

CLAIMS

1. A wound dressing composition comprising a partially cured polyurethane fluid.

5

2. A wound dressing composition according to claim 1, wherein the composition comprises at least 50% by weight of polyurethane components,

3. A wound dressing composition according to claim 1 or 2, wherein the
10 composition has been prepared by mixing a diisocyanate or a polyisocyanate component with a diol or polyol component

4. A wound dressing composition according to claim 3, wherein at least 10%
15 of the isocyanate groups originally present in the isocyanate component are still unreacted in the wound dressing composition.

5. A wound dressing composition according to any preceding claim, wherein
the absolute amount of unreacted isocyanate in the wound dressing composition is
less than about 4wt.%.

20

6. A wound dressing composition according to any preceding claim, further
comprising an additives selected from the group consisting of humectants,
plasticisers, hydrocolloids, blowing agents, medicaments, and mixtures thereof.

25 7. A wound dressing composition according to any preceding claim, wherein
the composition has a curing time at 25°C of from about 0.1 to about 100 minutes.

8. A wound dressing comprising a wound dressing composition according to
any of claims 1 to 7.

30

9. A wound dressing according to claim 8, further comprising reinforcing
elements to assist removal of the cured polyurethane composition in one piece
from a wound.

10. A wound dressing according to claim 8 or 9, further comprising drainage elements to assist drainage of exudate from wounds.
- 5 11. A wound dressing kit comprising: (a) a polyurethane prepolymer; and (b) a curing agent for the polyurethane prepolymer, as a combined preparation.
12. A wound dressing kit according to claim 11, wherein the components (a) and (b) are stored separately in a single package for mixing immediately before
10 use.
13. A wound dressing kit according to claim 12, wherein package comprises a barrier between the components that can be opened to allow the components to mix inside the package immediately before use.
- 15 14. A wound dressing kit according to claim 12 or 13, wherein the package comprises a mixing chamber for sterile mixing of the components immediately before use.
- 20 15. A wound dressing kit according to any of claims 11 to 14, further comprising one or more of the group consisting of reinforcing elements, drainage elements, and a secondary dressing.
16. A wound dressing kit according to any of claims 11 to 15, wherein
25 component (a) and component (b) are both liquids at temperatures above 5°C.
17. A wound dressing kit according to any of claims 11 to 16, wherein component (a) comprises an isocyanate capped prepolymer.
- 30 18. A wound dressing kit according to claim 17, wherein the prepolymer is prepared by reacting a diisocyanate with compound selected from the group consisting of castor oil, other esters of ricinoleic acid, and derivatives thereof.

19. A wound dressing kit according to any of claims 11 to 18, wherein the diol or polyol is selected from the group consisting of castor oil, other esters of ricinoleic acid, and derivatives thereof.

5 20. A wound dressing kit according to any of claims 11 to 19, wherein component (b) comprises a wound therapeutic material selected from the group consisting of antiseptics such as molecular silver, silver sulfadiazine or chlorhexidine; pain relieving agents such as lignocaine; anti-scarring agents such as mannose-6-phosphate, and agents for promoting wound healing such as
10 growth factors, and mixtures thereof.

21. Use of (a) a polyurethane prepolymer; and (b) a curing agent for the polyurethane prepolymer, in combination for the preparation of a wound dressing composition comprising a partially cured polyurethane fluid for application directly
15 to a wound as a wound dressing.